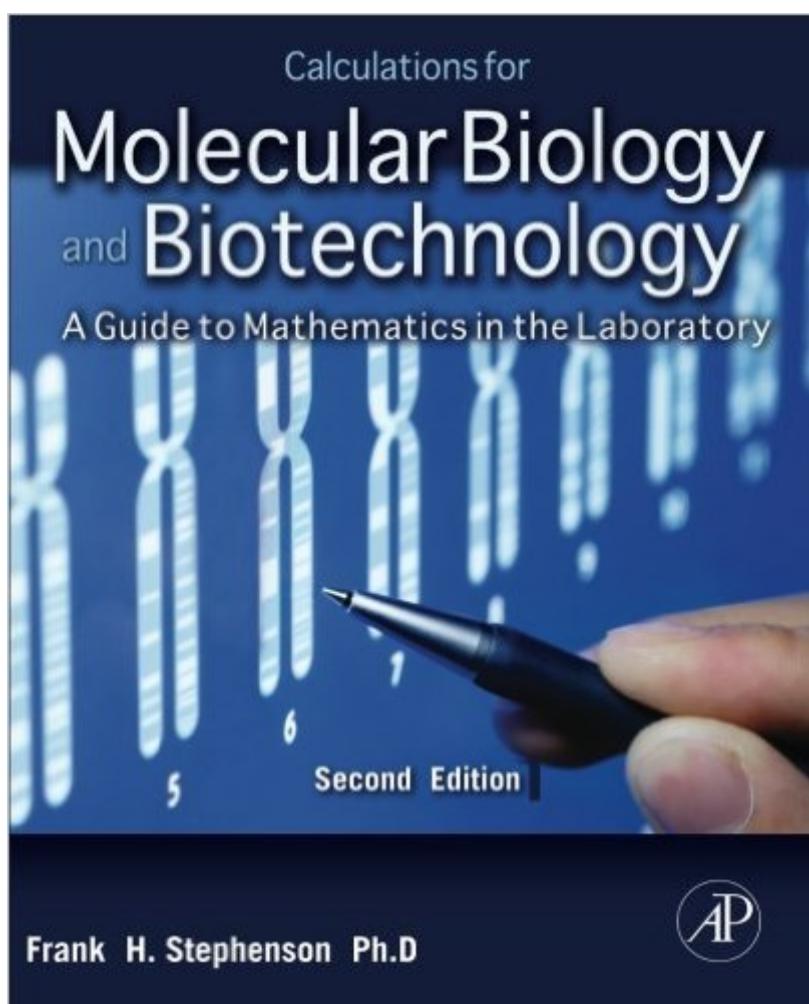


The book was found

# Calculations For Molecular Biology And Biotechnology, Second Edition: A Guide To Mathematics In The Laboratory



## Synopsis

Calculations for Molecular Biology and Biotechnology: A Guide to Mathematics in the Laboratory, Second Edition, provides an introduction to the myriad of laboratory calculations used in molecular biology and biotechnology. The book begins by discussing the use of scientific notation and metric prefixes, which require the use of exponents and an understanding of significant digits. It explains the mathematics involved in making solutions; the characteristics of cell growth; the multiplicity of infection; and the quantification of nucleic acids. It includes chapters that deal with the mathematics involved in the use of radioisotopes in nucleic acid research; the synthesis of oligonucleotides; the polymerase chain reaction (PCR) method; and the development of recombinant DNA technology. Protein quantification and the assessment of protein activity are also discussed, along with the centrifugation method and applications of PCR in forensics and paternity testing. Key Features:<sup>\*</sup> Topics range from basic scientific notations to complex subjects like nucleic acid chemistry and recombinant DNA technology<sup>\*</sup> Each chapter includes a brief explanation of the concept and covers necessary definitions, theory and rationale for each type of calculation<sup>\*</sup> Recent applications of the procedures and computations in clinical, academic, industrial and basic research laboratories are cited throughout the textNew to this Edition:<sup>\*</sup> Updated and increased coverage of real time PCR and the mathematics used to measure gene expression<sup>\*</sup> More sample problems in every chapter for readers to practice concepts

## Book Information

Paperback: 460 pages

Publisher: Academic Press; 2 edition (July 12, 2010)

Language: English

ISBN-10: 0123756901

ISBN-13: 978-0123756909

Product Dimensions: 7.5 x 1.2 x 9.2 inches

Shipping Weight: 2.4 pounds (View shipping rates and policies)

Average Customer Review: 4.6 out of 5 starsÂ  See all reviewsÂ (5 customer reviews)

Best Sellers Rank: #665,756 in Books (See Top 100 in Books) #150 inÂ Books > Computers & Technology > Computer Science > Bioinformatics #436 inÂ Books > Engineering & Transportation > Engineering > Bioengineering > Biotechnology #481 inÂ Books > Science & Math > Biological Sciences > Biology > Molecular Biology

## Customer Reviews

This book explains everything you need to know to succeed in a undergraduate or graduate course in molecular biology. It is short on theory but nails down the math needed to understand dilutions, enzyme units, etc. I would highly recommend this to anyone who has a math phobia when in the lab, but enjoys the discipline of biotechnology. I would have greatly benefited from this book when I was in school. I wouldn't have had to struggle with figuring everything out myself.

WOOOWWW..just started to read this and i am amazed of how much basics it has. i am a graduate in biology but never had this much of an info concised and pretty much clear. i recommend it to everyone wanting to make a career in this field. The only reason i gave it a 4 star instead of five is that it contains some printing errors which might confuse few readers. Other than that it deserves a five.

I needed this book for a cellular and molecular biology laboratory class I was enrolled in, this book makes the math really simple and easy to follow.

Good manual for the lab. Lots of good information/formula at your fingertips.

Okay for review.

[Download to continue reading...](#)

Calculations for Molecular Biology and Biotechnology, Second Edition: A Guide to Mathematics in the Laboratory Basic Laboratory Calculations for Biotechnology Building Biotechnology: Biotechnology Business, Regulations, Patents, Law, Policy and Science Molecular Biotechnology: Principles and Applications of Recombinant DNA Power Laws, Scale-Free Networks and Genome Biology (Molecular Biology Intelligence Unit) Demystifying Opioid Conversion Calculations: A Guide for Effective Dosing (McPherson, Demystifying Opioid Conversion Calculations) Fundamental Laboratory Approaches for Biochemistry and Biotechnology Drug Calculations: Ratio and Proportion Problems for Clinical Practice, 9e (Drug Calculations Companion) Cellular and Molecular Immunology, 8e (Cellular and Molecular Immunology, Abbas) Histology: A Text and Atlas, with Correlated Cell and Molecular Biology, 6th Edition Clinical Laboratory Hematology (3rd Edition) (Pearson Clinical Laboratory Science Series) Molecular Biology of the Gene (7th Edition) Rarefied Gas Dynamics: From Basic Concepts to Actual Calculations (Cambridge Texts in Applied Mathematics) Vitamin D: Physiology, Molecular Biology, and Clinical Applications (Nutrition and Health) Histology: A Text and Atlas: With Correlated Cell and Molecular Biology Histology: A Text

and Atlas: With Correlated Cell and Molecular Biology (Histology (Ross)) Biological Modeling and Simulation: A Survey of Practical Models, Algorithms, and Numerical Methods (Computational Molecular Biology) Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests With Nursing Implications (Davis's Comprehensive Handbook of Laboratory & Diagnostic Tests With Nursing Implications) Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests With Nursing Implications (Davis's Comprehensive Handbook of Laboratory & Diagnostic Tests W/ Nursing Implications) BRS Biochemistry, Molecular Biology, and Genetics (Board Review Series)

[Dmca](#)